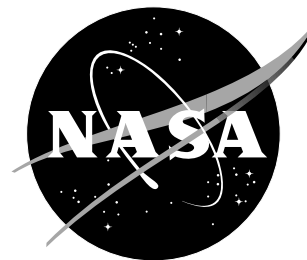


# NewsRelease

National Aeronautics and  
Space Administration

**Langley Research Center**  
Hampton, Virginia 23681-0001



Chris Rink  
(757) 864-6786

For Release: May 24, 2002

Julia Cole  
(757) 864-4052

RELEASE NO. 02-038

## **NASA Langley scientists to present new earth science research at AGU**

Scientists from NASA Langley Research Center in Hampton, Va., will report on new atmospheric science research at the American Geophysical Union (AGU) spring meeting in Washington, D.C., May 28-31, 2002. Highlights of scheduled sessions and papers follow:

### **CLAMS Study the Ocean and Atmosphere**

Last summer six research aircraft equipped with specialized instrumentation measured properties of the ocean and atmosphere surrounding the Chesapeake Bay Lighthouse under the observing eye of NASA's Terra satellite. This field campaign, called CLAMS (Chesapeake Lighthouse and Aircraft Measurements for Satellites), will improve data from Terra and ultimately the understanding of global climate change. Thomas Charlock and Bill Smith, Jr. will chair a session highlighting key results from CLAMS. Tuesday, May 28, 8:30 a.m.— Washington Convention Center (WCC), Hall 13; Session A21D

### **Fires Leave Signature on Earth's Energy Balance**

Large biomass burning events can alter the energy balance at the Earth's surface by producing plumes of smoke which contain aerosols that absorb and reflect the sun's energy. A new analysis of computer models and satellite and surface measurements of a large forest fire in Manitoba, Canada, in 1989, is helping scientists determine exactly how much fires impact the radiation balance and, after further analysis, perhaps global climate. Stephen Cox of Analytical Services and Materials, Inc., will present this paper that is co-authored by Paul Stackhouse of NASA Langley. Tuesday, May 28, 3:05 p.m.— WCC, Hall 15; Session A22E

### **SAGE Advice on Aerosols and Ozone**

Over 17 years of satellite observations from NASA's Stratospheric Aerosol and Gas Experiment (SAGE) II revealed significant findings on ozone trends and aerosols, including the effects of the 1991 Mount Pinatubo eruption. NASA Langley scientists Joseph Zawodny and Larry Thomason will chair a session on how new applications of the SAGE II data are contributing to the understanding of these important drivers of global climate change. Wednesday, May 29, 1:30 p.m.— WCC, Hall 20; Session A32D

- more -

### **Cooling the Earth's Middle Atmosphere**

The atmospheric region 50-60 kilometers above the Earth's surface is undergoing a small but significant cooling trend, atmospheric scientist Ellis Remsberg will report. This cooling is roughly consistent with known increases in atmospheric carbon dioxide. He analyzed nearly a decade's worth of satellite observations from the Halogen Occultation Experiment (HALOE) instrument to determine the temperature change.

Thursday, May 30, 2:15 p.m.—WCC, Hall 13; Session A42D

### **Studying the Last Atmospheric Frontier**

The successful launch of a satellite carrying the SABER (Sounding of the Atmosphere using Broadband Emission Radiometry) instrument in December 2001 marked the beginning of the first comprehensive global observations of the Earth's upper atmosphere. Marty Mlynczak, associate principal investigator for SABER, will present initial findings on how sunlight and gases such as carbon dioxide impact the temperature of the upper atmosphere.

Friday, May 31, 10:40 a.m.—WCC, Hall 23; Session SA51A